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PROCEEDINGS
OF
THE ROYAL GEOGRAPHICAL SOCIETY.

[ISSUED FEBRUARY 10TH, 1869.]

SESSION 1868-69.

First Meeting, 9th November, 1868.

SIR RODERICK I. MURCHISON, BART., K.C.B., PRESIDENT, in
the Chair.

ELECTIONS.—*Daniel Griffin, Esq.; M. Alexis de Lomonosoff; Dr. A. E. Mackay, R.N.; Lionel Shirley, C.E.*

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The PRESIDENT opened the Session with the following Address :—

GENTLEMEN,—In opening this Session—the fourteenth in which, through your good will, I have presided over you—I am sorry to have to commence my observations with the expression of deep regret, that, owing to the demolition of the fine palladian gateway, arcades, and wings of Burlington House, we have lost that capacious hall for our meetings, which had so long been placed at our disposal by the Royal Society and the University of London.*

* I was one of the deputation which, in the year 1856, waited on Lord Palmerston, when Prime Minister, to request that he would assign Burlington House and its accessories (then recently acquired by the Government) to the men of Science of the metropolis, for the transaction of their business and the meetings of their several bodies. In cordially assenting to our request, his Lordship, who was a great admirer of that noble specimen of Palladian architecture,—now, alas! dismantled,—added, that all which was required to render the edifice a fitting receptacle for men of Science and Letters, and at the same time a public

It has naturally been gratifying to me to have had it in my power to enable you to assemble, for the first day in this Session, in the theatre of the establishment which has been under my direction for the last thirteen years. On this occasion I am, therefore, quite at home, whether as the Geological Director or as the Geographical President. It will not, however, I must tell you, be possible to ask you to meet here again, inasmuch as on all the succeeding Mondays in the winter months this locality is bespoken and is most usefully occupied by the Professors of the Royal School of Mines in giving lectures to working men.

It having thus become my duty to look out for a "local habitation" elsewhere, I first applied to the authorities of the University of London, and by their kind consideration I was led to believe that we might very soon be permitted to assemble in the great hall of their new building, as, indeed, I announced in my last anniversary Address. But as that structure will not be completed before next summer, I next applied to the President and Managers of the Royal Institution, who have most kindly assented to my request. After this evening, then, our meetings will be held in that scientific theatre in Albemarle Street, wherein in past times the discoveries of Davy and Faraday were made known, and where in our days Tyndall is worthily sustaining the renown of that institution.

We thus tide over present obstacles; but I earnestly hope that, before long, Her Majesty's Government, seeing that no scientific body is more connected than we are with the Colonial and Foreign Departments of State and the commercial interests of the Empire, will not allow us to stand behind the other Societies, for whom most ample accommodation is supplied, but will aid us in establishing an adequate Geographical home.

Among the events which have transpired during our long vacation, I have to congratulate you on the very successful proceedings of the Section of Geography and Ethnology at the Norwich meeting of the British Association, and I specially commend to your notice the able Address of the President, Captain Richards, the Hydrographer to the Admiralty. I may here mention that the scientific products of those deep-sea soundings, to which he made such pertinent allusion in treating of submarine geography, will shortly receive much novel addition and striking illustration in a communication by Dr. Carpenter to the Royal Society, in which he will so explain the results of his recent dredging operations in the Northern

ornament, would be simply to remove the high brick wall in front, and replace it by a handsome open railing, through which the passers by in Piccadilly might admire the whole architectural scene. I place the fact on record, as a proof of the good taste in art of an illustrious and lamented statesman.

Seas, as to throw much new light on submarine life which will particularly interest the geographer and largely instruct the geologist.

Of all the events, however, which have transpired since we last assembled, nothing, I am sure, can have gratified us so much as the news which has recently reached us of the progress made by our eminent associate Livingstone, during the ten months which elapsed between the date of his last letters to me and others, and that of his last letter to Dr. Kirk, of December, 1867. His unrivalled perseverance and courage, in getting successfully through the many heavy trials to which he has been subjected, have been strengthened by his trust in that Divine Providence which has hitherto protected him during his heroic efforts, whether to advance human knowledge or to implant the truths of religion in the hearts of the negro race. In his last letters, which are extremely brief, he has not communicated the geographical results of his journey to the southern end of Lake Tanganyika. He speaks, however, of a chain of lakes connected by a river with Tanganyika, and has visited Cazembe and other towns belonging to the powerful negro chiefs of this remote part of the interior.

Awaiting, as I do, in fervent hope, the day when a national burst of joyfulness shall welcome the great traveller on his return to Britain, I may be allowed to say that throughout my long life I have never been so truly delighted as in finding that my persistence in the belief in the existence and in the successful progress of my illustrious friend has up to this time been fully verified. God grant that the last link may speedily be added to his long chain of adventures, and that Livingstone may bring us, in his own person, the history of all his wanderings!

The attention of our Society has been strongly drawn of late towards Central Asia, and particularly to the vast regions which border the north-eastern and north-western frontiers of British India. The principal region in the north-east embraces the country lying between Assam and Szechuen, the most westerly province of China. A warm desire was expressed by a committee of the British Association, as well as by our Council, that this intervening space, of about 250 miles only, should be explored, in order to ascertain if there be practicable passes through the high mountains and wild tracts which separate the upper waters of the Yangtse-kiang, from the Brahmaputra at its great bend near Sudiya. Although as yet no positive effort has been made to solve the important problem, endeavours are being carried on by the Indian authorities to open up a route for traffic, along a more southerly line, between British Burmah and the great Chinese province of Yunnan, now essentially

independent of Chinese rule, and most desirous of establishing a trade with our settlements on the Irawaddy.

Of still more pressing importance, however, than an acquaintance with the regions just alluded to, is an exploration of the vast and unexamined tracts on the north-west, far beyond the tributaries of the Upper Indus—or between Peshawur and Jellalabad on the south, and the centres of trade and population at Yarkand and Kashgar. The main object is to define the physical character of the vast elevated plateau called Pamir, or “Roof of the World,” from which the Oxus and Zarafshan take their rise, and from which the lofty chains, the Kuen-Lun, the Himalaya, and Hindoo Koosh, radiate. In a former Address (1867), I dwelt upon the essential importance of such knowledge, to be acquired equally by the Russian Government and by our own; and I then said that this great table-land or watershed ought to be constituted the neutral ground between the two empires, and to be considered as a broad zone to be for ever interposed between Eastern Turkestan—towards which Russia is now advancing—and the most northern limits of our Indian possessions.

With a view to taking a first step in this desirable exploration, the Council of our Society sent out last spring a practised traveller, Lieutenant Hayward, to traverse this region from Peshawur. He offered himself, and indeed undertook the mission entirely on his own responsibility and risk, and, having a good acquaintance with the native dialects, he will proceed in the habiliments of the country. In a letter which I have received from him, he informs us that, owing to the turbulent state of some of the hill tribes beyond our frontier, he had been prevented from taking a direct route to Yarkand, and was therefore proceeding thither through Cashmir, with the intention of returning by the Pamir steppe. Already he has communicated to us a sketch-map of the region in question, which differs essentially from the published documents. This he has accomplished through a careful examination of the journal of an intelligent merchant of Yarkand, who describes so precisely every day's march, and the distance as well as the nature of the country he traversed, as to enable Mr. Hayward to prepare the map. The letter of this gentleman, and extracts from the diary of Mahomed Amin, the Yarkand merchant, will be read to you this evening, and the subject, including accounts of passes practicable for commercial enterprise, will be fully discussed, I hope, by Sir Henry Rawlinson and Lord Strangford, who have taken the deepest interest in it.

These papers will be followed by a memoir by the Russian geographer Severtsof, which throws great light on the whole region north of the River Jaxartes, which has been translated and con-

densed by Mr. Michell. The map and sections which accompany the description of the journey of M. Severtsof form considerable additions to our previous knowledge of the flanks of the western portion of the great chain, the Thian-Shan, the eastern extension of which forms the southern boundary of all the Russian explorations. In this way we commence our Session with subjects which are of great national importance as well as of deep interest to the geographer and statesman.

For my own part, I desire to see all the wild countries lying between the new acquisitions of Russia and British territory as well explored by Russian as by British geographers and explorers, in order that passes through the mountains may be delineated, to facilitate the traffic which must arise between those fertile tracts of Turkestan and our merchants of Western India.

The completion of such an object, accompanied as it must be by the improvement and civilisation of the inhabitants of the intermediate wild tracts, is surely well worthy of the endeavours of both nations, who will thus be as mutually interested in such an international commerce in Asia as was for a long period so advantageous to both in Europe.

It is not, of course, in my power to announce to you as yet many of the subjects which will be brought before you in the course of the session now commenced; but I may inform you that already we have in hand, besides papers on various parts of Central Asia, a memoir on Abyssinia by Dr. Blanc, the companion in captivity of Mr. Rassam, describing the western part of that region, which was not visited by the British army; also a well-digested account of the geography, statistics, and natural productions of Manchuria,—the great north-eastern province of China,—by Mr. Williamson, a missionary. The latter work, accompanied by a map (in which the correct outline of the coast and bays is taken from our excellent Admiralty charts, and the interior founded on the map of d'Anville), adds much to our previous knowledge, and contains a clear description of the fertility and rich productions, both vegetable and mineral, of this vast region, which cannot fail to interest the mercantile community of all civilised countries, whilst the physical geographer will be much struck with the delineation of the great mountains and rivers of a vast territory which still remains in perfect order under Chinese rule.

In concluding these few anticipatory remarks, I must say, that besides the results of the explorations of Livingstone in South Africa, to which we look forward so anxiously, I have received a map of the lake regions of Equatorial Africa from our medallist Dr. Petermann, which he has elaborated from data recently received

from the travellers Carlo Piaggia and Ambroise and Jules Poncet, who have pushed their researches across a portion of Central Africa hitherto unexplored, extending to 23° and 24° E. long., and to a little more than one degree north of the Equator. As these extreme points are not less, according to Petermann's map, than from 500 to 600 miles west of Lake Albert Nyanza of Baker, and as M. Piaggia obtained information of the existence of another vast interior lake lying on the Equator and extending from the south of it, an entirely new field for research is thus laid open to the enterprise of explorers, who will have to determine whether the streams issuing from this immense lake, and the adjacent region to the west of 25° E. long., do not flow from a watershed entirely separated from that of all the affluents of the Nile, and which sends its waters into the South Atlantic Ocean, and probably by the great river of Congo. I may add, that this is not the first information that geographers have received of the existence of another great equatorial lake to the west of the Albert Nyanza; but the accounts hitherto received have been more or less vague, and no European traveller has been so near to its shores as Carlo Piaggia. Much credit is due to the Marquis Antinori, himself a traveller in these regions, for adapting the itineraries of Piaggia to the positions established by English travellers, and publishing the results in the Bulletin of the newly-established Geographical Society of Italy.

With these few words of introduction, referring to some of the more important topics which are to come under your notice in the course of the session, I earnestly trust that the session now commenced may be one of as great interest as many of those which have preceded it.

The PRESIDENT, before calling upon the Secretary to read the first communication, said he was sure every person in the assembly would agree with him that they were greatly honoured by the presence of the Queen of the Netherlands, a lady who, accomplished in the highest sense of the word, took the deepest interest in the advance of Letters, Science, and Art.

He added that the announced programme of the proceedings for the evening would be a little deviated from, owing to his having most unexpectedly received a letter from the Foreign Office, enclosing letters from Livingstone himself, written to his friend, Dr. Seward, whom he still supposed to be Consul at Zanzibar. One of these letters would be read to the meeting.

The following letter of Dr. LIVINGSTONE's to Dr. Seward was read by Mr. Markham :—

“MY DEAR SEWARD,

“Town of Cazembe, 14th December, 1867.

“One of Seyd ben Ali's men leaves this to-morrow to join his master in Buira. He and Hamees have letters from me to you: one of these, in the hands of Hamees, repeats an order for goods, which I sent by Magera Mafupi